



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
<http://www.blm.gov>



IN REPLY REFER TO:
3590
UTU-78187
(UT-923)

COPY

CERTIFIED MAIL--Return Receipt Requested

Christian Meyre
6055 E. Croydon Road
Morgan UT 84050

RECEIVED

AUG 25 2011

AUG 23 2011 DIV. OF OIL, GAS & MINING

Re: Mine Plan Modification Approval, Federal Gilsonite Clay Lease UTU-78187,
Koosharem Clay mine.

PLAN OF OPERATION MODIFICATION APPROVAL

Background-The Bureau of Land Management (BLM) received your request to modify your plan of operation that was originally approved on October 14, 2004 for the Koosharem Clay mine, located on the Fishlake National forest in Piute County. This modification includes utilizing blasting which will not exceed 95.1 pounds of explosive per 25 millisecond delay and increase the size of the pit by approximately 5 acres.

Approval-This approval is based on the Decision Record (DR) for the Environmental Assessment DOI-BLM-UT-9230-2010-006-EA which is enclosed. The lessee/operator shall ensure compliance with all monitoring and compliance conditions of approval on Attachment 1 of the referenced document (enclosed).

NEPA-NEPA has been conducted and an Environmental Analysis (EA) along with a Finding of no Significant Impact (FONSI) has been signed. The EA number is DOI-BLM-UT-9230-2010-006-EA, 2011. The FONSI was signed on August 23, 2011 for modifying the operations plan at the Koosharem Clay mine.

Bond- Currently the Utah Division of Oil, Gas, and Mining holds an \$80,000 bond for reclamation. The BLM will request a bond under separate cover for production rentals and royalties.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4, and the enclosed Form 1842.1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30

days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (pursuant to regulation 43 CFR 4.21)(58 FR 4939, January 19, 1993) (request) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay **must** also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed in this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

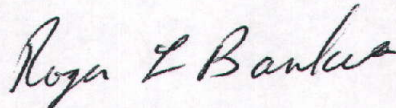
Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards.

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

For further information contact Mr. Stan Perkes, (801) 539-4036.

Sincerely,



Roger L. Bankert
Chief, Branch of Minerals

Enclosures: Decision Notice Koosharem Clay Mine Expansion and Blasting
Form 1842.1

cc: Utah Division of Oil, Gas, and Mining (Attn. Peter Brinton), 1594 West North Temple, P.O. Box 145801, Salt Lake City, Utah, 84114-5801
Utah Division of Water Rights, Dam Safety, (Attn. Everett Taylor), 1594 W. North Temple Suite 220, Salt Lake City, UT 84116
Fishlake National Forest, (Attn. Rob Hamilton) 115 East 900 North, Richfield, UT 84701

**United States Department of the Interior
Bureau of Land Management**

RECEIVED

AUG 25 2011

**Environmental Assessment
DOI-BLM-UT-9230-2010-006-EA**

DIV. OF OIL, GAS & MINING

July 2011

**Koosharem Clay Mine Expansion and Blasting
Federal Clay Lease UTU-78187**

Location:

Fishlake National Forest, T. 27S., R. 2W., Section 2, SE¼, SLBM, Piute County, Utah

Applicant/Address:

Holcim (US) Inc.
201 Jones Road
Waltham, MA 02451

Local Address
6055 Croydon Road
Morgan, UT 84050-9551

Utah State Office
440 West 200 South, Suite 500
Salt Lake City, UT 84101-1345
801-539-4036
FAX 801-539 4200



DECISION RECORD
Environmental Assessment

DOI-BLM-UT-9230-2010-006-EA

Koosharem Clay Mine Expansion and Blasting
Federal Clay Lease UTU-78187

I have decided to approve the modification to the Koosharem Clay mine, mining plan to include the following actions;

1. Approve a mining plan modification to allow an expansion of the existing mine of approximately 5 acres (see Map 1). Reclamation would be required as part of the current lease. There will be no expanded production from the mine.
2. Approve a mining plan modification to allow blasting at the Koosharem Clay mine. The weight of explosive cannot exceed 95.1 pounds per 8 millisecond delay and the other operator committed practices.

Authorities: Lands which the Utah State Institutional Trust Lands Administration (SITLA) issued Utah State Leases for Clay including, ML-27206 (T. 27 S., R. 2 W. Section 2, lots 1 and 2, S1/2 NE1/4) and ML-27110 (T. 27 S., R. 2 W. Section 2, SE1/4), were owned by (SITLA) under Section 6 of the Utah Enabling Act. On October 31, 1998, The Utah Schools and Lands Exchange Act of 1998 (Public Law 105-335) was signed by the President of the United States to exchange certain non-federal lands (including the surface and mineral interests in the above referenced lands) for federal lands. On January 7, 1999 the surface and mineral estate was conveyed to the United States by SITLA. The interests in State Leases ML- 27206 (issued November 19, 1970) and ML-27110 (issued September 14, 1970) therefore became Federal Clay Leases UTU-78188 and UTU-78187 respectively and are administered by the United States, Bureau of Land Management (BLM), and the surface estate is administered by the Fishlake National Forest. The BLM succeeded SITLA, as Lessor of the leases. The Lease UTU-78187 was issued on November 19, 1970 and grants. "... the exclusive right to explore for, drill for, mine, remove, and dispose of the particular mineral (clay) ..."

Compliance and Monitoring: Attachment 1 lists the compliance and monitoring conditions of approval COA's that shall apply to this mining plan modification approval. The COA's address the blasting at the mine and monitoring at the Lower Box Creek Reservoir. The Operator committed practices apply to the actual procedures that will be conducted at the mine during the blasting and these are listed as Attachment 2.

Mitigation: The BLM has previously placed terms and conditions (COA's) on the mining plan that will mitigate issues found in past analyses. See Attachment #3 for a complete list of these COA's. These were listed in the EA on pages 12-14.

PLAN CONFORMANCE AND CONSISTENCY:

The proposed action and alternatives have been reviewed and found to be in conformance with the Fishlake National Forest Land and Resource Management Plan (LRMP). The Proposed Action is consistent with Forest-wide direction identified in the LRMP. The Proposed Action would occur within Management Area 4B which places emphasis on the "habitat needs of one or more Management Indicator Species". The management prescription for MA-4B is found in the Forest Plan on pages IV-95 to IV-102.

The 1986 Fishlake National Forest Plan as amended. Management Direction on page IV-5 Minerals states, "Encourage mineral exploration, development and extraction consistent with management of surface resources".

Alternatives Considered: There were two alternative considered. The first alternative was to approve the mining plan modification and the second alternative was a no action alternative. The no action alternative would have not approved the pit expansion and would have allowed no blasting. There were no other issues that would drive different alternatives. There were no, alternatives considered but eliminated from the analysis.

Rationale for Decision: There were no significant impacts identified in the analysis and therefore the proposed action which includes COAs would meet the purpose and need of the leasee.

- Adoption of this alternative would allow Holcim to continue to provide the needed clay and to "furtherance (the) production, treatment, and disposition of the leased substances (clay) under this lease".
- Adoption of this alternative would allow Holcim to continue to exercise their lease right to "mine, remove and dispose of "clay in a manner that is "necessary and expedient for the economic operation of the leasehold".
- The action conforms to the existing land use plan, regulations, rules and laws. The project was placed on the Environmental Bulletin Board on July 20, 2010. The EA was placed on the ENBB on June 27, 2011 and did not receive any comments. Scoping was accomplished with the Fish Lake National Forest resource specialists who determined that there were no issues to be brought forward. Input to the analysis was specifically obtained from the owners of the Lower Box Creek Reservoir. Their concern that was specifically addressed was the effect of blasting on the faults. Partial reviews were conducted by the Utah Division of Oil, Gas and Mining (UDOGM), the Utah Division of Dam Safety, the Office of Surface Mining (OSM) and the Mine Safety and Health Administration (MSHA). They provided important input to the document.

The only other alternative was No Action. This was not selected for the following reasons:

- Adoption of this alternative may not allow Holcim to continue to provide the needed clay and to "furtherance (the) production, treatment, and disposition of the leased substances (clay) under this lease".

- Adoption of this alternative would not allow Holcim to continue to exercise their lease right to "mine, remove and dispose of "clay in a manner that is "necessary and expedient for the economic operation of the leasehold".

Protest/Appeal Language: This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4, and the enclosed Form 1842.1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

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- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

Roger L. Banks
Authorized Officer

8/23/11
Date

Maps/Attachments:

Map 1: Map showing location of Koosharem Clay mine expansion and proximity to the Lower Box Creek Reservoir

Attachment 1: Monitoring and Compliance Conditions of Approval

Attachment 2: Operator Committed Practices

Attachment 3: Previous COA's that are still in effect.

Enclosed Form 1842.1







Koosharem Clay Mine Map 1



Township 27 South Range 20 West
Fish Lake National Forest



Legend

- | | | |
|---|-------------------|----------------------------|
|  | New Mining Area | Koosharem Clay Mine |
|  | Disturbed Area | |
|  | BLM Survey Points | |
|  | Distance to Dam | |
|  | Roads | |
|  | Topography | |



0 265 530

Feet

Attachment 1: Monitoring and Compliance Conditions of Approval

The following Condition of Approval shall be placed on the mining plan approval.

1. **Blasting:** The operator/lessee shall conduct the blasting operations in a manner to assure that there is no damage to offsite structures. The peak particle velocities and frequency's resulting from the blasting operations shall be at such a level as to create no damage to the Lower Box Creek Reservoir dam and structures. This shall include but not be limited to inlet, outlet, spillway, drains and the earthen dam itself.
2. **Public Safety:** The operator/lessee shall appropriately place signs 24 hours prior to blasting to notify the public that blasting will take place. The operator/lessee shall physically notify any persons that are at the Lower Box Creek Reservoir prior to blasting.
3. **Plan of Action (POA):** The operator/lessee shall submit a plan of action to the AO prior to conducting the blasting. This plan shall include as a minimum:
 - A. The pre-dam inspection investigation. The operator/lessee shall be responsible for knowing and documenting the condition of the dam, and related structures including the outlet structure. This shall be documented and pictures are required. Picture locations will be proposed by the operator/lessee and will be authorized by the BLM, the Fishlake National Forest and the Utah Division of Dam Safety. Color video using an underwater camera of the interior of the outlet structure is required. This inspection should be coordinated with the dam owner, the BLM, the Utah Division of Dam Safety, and any other interested agency.
 - B. The post-dam inspection. The results of the inspections shall be reported to the AO within 30 days after the inspection. This shall include but not be limited to the following:
 1. Immediately after the time that blasting is conducted, the operator/lessee shall inspect the outlet structures. If damage is found contact the AO immediately
 2. Annually the lessee shall inspect the dam after the blasting campaign. The BLM, the Fishlake National Forest, the Utah Division of Oil, Gas and Mining, and the Utah Division of Dam Safety shall be invited to attend. Photographs are required and sites will be proposed by the operator/lessee and shall be taken as a minimum at the same location as the pre-dam inspection photos. The outlet structure shall be inspected via underwater camera.
 3. If there is a recorded PPV that is equal to or exceeds 0.5 inches per second based on the monitoring equipment, the following shall immediately (within 24 hrs) take place as a minimum:
 - i. The dam owner and the AO will be notified and the mine operator shall secure the rights to inspect the dam.
 - ii. The lessee shall inspect the outlet structure by having the valves closed to ensure there is no leakage.
 - iii. The dam out let structure shall be photographed. This can be accomplished via color underwater camera or some other method approved by the AO.
 - iv. The dam shall be inspected annually or more often if the AO requires, by the operator/lessee for 3 years after this event. All inspections shall

be coordinated with the dam owner, the BLM, the Fishlake National Forest, the Utah Division of Oil, Gas and Mining, and the Utah Division of Dam Safety.

- v. If damage is found then the AO shall be notified immediately.
 - C. Blasting Monitoring procedures and results. This section of the POA shall provide for the monitoring of all blasting operations near the dam. The plan shall include as a minimum the type of equipment to be utilized, calibration of the equipment, placement of the equipment and its location, data extraction and reporting requirements. Manufacturer specifications shall be followed when programming and placing the equipment. Installation of the equipment and the selection of equipment location shall be done in accordance with the ISEE, Field Practice, Guidelines for Blasting Seismographs, 2009 Edition. All data shall be submitted to the AO according to the plan.
 - D. Safety precautions taken and personnel used to ensure safety procedures are followed.
 - E. The steps that would be taken if there is damage found during the dam inspection after the blasting occurs.
 - F. These reports shall be submitted to the AO within 30 days after blasting.
- 4. Damage Mitigation: The operator/lessee shall be completely responsible for all damages to the dam and outlet structures of the dam that are attributable to the blasting/mining operation.
 - 5. Stipulation Waiver: If the operator/lessee can show that there has been no damage to the dam due to the blasting, he may submit data and apply to the Authorized Officer to have this requirement waived. The Authorized Officer may waive it at his discretion based on the facts that are presented.
 - 6. Cultural Resources. All personnel will refrain from collecting artifacts and from disturbing any significant cultural resources in the area. The lessee is responsible for informing all persons in the area who are associated with this project that they may be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts. All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to the areas examined, as referenced in the archaeological report, and to the existing roadways and/or evaluated access routes. If historic or archaeological remains are uncovered during construction, the lessee is to immediately stop work that might further disturb such remains and contact the Authorized Officer (AO).

Within five working days after contacting the BLM, the AO will inform the lessee as to: 1) whether the remains appear eligible for the National Historic Register of Historic Places; 2) the mitigation measures that the lessee will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and, 3) a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the lessee wishes, at any time, to relocate activities to avoid the expense of delays associated with this process, the AO will approve a mitigation plan for whatever recordation and stabilization of the exposed materials may be required. The lessee will be responsible for recordation, stabilization and mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer (AO) that required mitigation has been completed, the lessee will then be allowed to resume activities.

Attachment 2: Operator Committed Practices

Applicant Committed Measures:

Holcim (US) Inc. - Blasting Procedures

LOCATION: KOOSHAREM CLAY QUARRY

PURPOSE:

This procedure describes the actions taken by the Quarry Team to blast.

WORK INSTRUCTION:

1. The blaster-in-charge (BIC), designated by the Quarry manager, is in charge of and responsible for all loading and blasting activities and delegates activities as necessary to safely accomplish the required objectives.
2. Inventory procedures, checking out of explosives and blasting supplies should be reviewed by blasting personnel with the blaster-in-charge (BIC) and understood.
3. The explosives truck should have a thorough walk-around inspection and the log book in the truck should be filled out. The truck should be in good operating condition. The BIC and ANFO supplier would conduct a walk-around of the bulk ANFO truck before it is allowed to enter the blast site and dispense ANFO.
4. A pre-shot inspection of the blast site should be conducted. Blast holes should be counted, checked for depth and water before proceeding. **A set-back line at a minimum of six (6) feet from any free face shall be painted on the blast site and any access required less than six (6) feet from any free face would require fall protection to be worn.**
5. In the event of thunder or electrical storms, all blasting related activities should cease and blasters should move out of the blast area until the danger passes and it is deemed safe by the BIC. Loading activities shall never go on during a thunder or electrical storm.
6. All drilling and non-blasting related equipment would be moved off the loading site before proceeding.
7. The quarry area and blasting area would be blocked off with cones and signs to advise of current loading activities.
8. Blasting caps would never be transported with explosives (boosters, slurry gels, ANFO, detonating cord) unless in a compliant day box. In the event a day box is not available, caps must be transported to the loading site separately. Caps would never be stored by explosives until the hole is ready to be primed and loaded. Explosives shall not be left on a loading site unattended.
9. Smoking or possession of smoking materials is not permitted within 50 feet of blast site, explosives truck or explosive storage areas.
10. Before priming blast holes, holes would be double checked for proper hole depth and water.
11. Down hole leads would be secured at the collar of the hole to prevent the leads from being lost down the hole while loading or stemming.
12. High explosives (boosters) would never be drop-loaded. They would be lowered into the hole by the blasting cap leads until they reach the bottom of the hole. Slit packages of slurry gel may be drop-loaded

13. The powder stick or tape measure would be used on each hole to insure the proper column height of explosive and stemming.
14. Use of bars made of steel or any other sparking material to try and clear a blocked hole is forbidden after a hole is primed. Metal bars can be used before a hole is primed to attempt to clear blockage. Under no circumstance should a primer or any other high explosive be tamped with a bar or stick.
15. Stemming should be -1" rock or smaller. Large rocks could damage down hole leads or block the hole creating an air gap. An air gap could result in fly rock and poor blasting efficiency. Blast holes would always be stemmed to the top of the hole.
16. When using detonating cord and tying in the down hole leads to the trunk line, always hook the lead to the trunk line at a 90° angle to prevent possible cut off. Down hole leads would be checked for kinks and knots before being hooked to the trunk line.
17. Connection of blast holes via trunk line or Handi-det system shall not be made until immediately before clearing the blast site. Lead-in-lines shall be manually unreeled if connected to the trunk lines at the blast site.
18. When detonating cord is used, a redundant tie-in procedure shall be used so that initiation from the trunk line can occur at each blast hole from at least two directions. Other products shall be used according to supplier instructions and methods.
19. The blast area would be cleared and access blocked before the fuse cap is taped to the detonating cord trunk line or the lead-in-line is hooked to the shot initiating device. Designated blockers would be placed at each access into the **quarry** area and physically block the road with a truck or loader or a bulldozer to prevent any passage into the **quarry** area.
20. The BIC would give three radio announcements of the impending blast, each announcement two minutes after the previous one. When the third announcement is given, the fuse would be lit or the lead-in-line detonated. The BIC would give the "fire in the hole" signal at this point. The fuse would take between 2:30 and 2:45 to burn before the shot goes off. The lead-in-line detonation is immediate.
21. After dust and gas has cleared the area, the BIC and his team would go back to the blast site and conduct a post-shot inspection to look for misfires or any other problems. In the event of a misfire, the Quarry Manager shall be notified and the shot area shall be immediately cleared. The Quarry Manager and the BIC would then decide on an appropriate plan to handle the misfire.
22. After the BIC is satisfied that the blast went correctly, he would give an all clear signal over the radio and release the blockers by checking in with each one and receiving confirmation back from them. Normal operations can then resume.
23. Unused explosive material would be returned to proper storage areas and a physical and written inventory would be conducted at the proper paperwork would be returned to the storage facilities and quarry office. Paper work would be audited for accuracy by the Quarry Manager.
24. The blasting shall not exceed 95.1 pounds of explosive per 25 millisecond delay.

Attachment 3: Previous COA's that are still in effect.

**Mining Plan Approval Conditions of Approval and Administrative Stipulations:
Conditions of Approval-**

1. Post Warning signs at the entrance of the quarry and other public access points.
2. Construct fences or other barriers as necessary to prevent vehicles from accessing the highwall and other steep slopes at the mine.
3. Seed and re-vegetate all topsoil stock piles to protect from erosion.
4. Restore non-clay overburden to mined area and eliminate high walls, re-contouring the land surface to pre-mining conditions as much as possible given remaining material.
5. Re-grade slopes to 20 degrees or less (about 3:1 slope) after clay has been removed where fill material is available to do so.
6. Preserve, stockpile and replace topsoil over re-contoured slopes and flat areas.
7. Seed all reclaimed areas with a Forest Service recommended seed mix, apply composted manure or mulch to reclaimed areas.
8. Leave 75 foot undisturbed buffer from the centerline of the road from Forest road 069 and place barriers as necessary to provide for public safety.
9. Perform concurrent reclamation of disturbed areas no longer essential for ongoing mining operations, and conduct total reclamation of the entire mine site upon cessation of mining operations.
10. Install structure or otherwise design mining activity so that all runoff from disturbed areas at the mine is retained on-site. Develop a small retention structure or pond to hold runoff from the west side of the mine and maintain the existing earth berm along the west side that prevents storm water from leaving the site.
11. Prepare a hazardous spill plan as part of the mining plan that requires equipment operators to remove oil and other fluids to a proper disposal site, and identifies proper notification and cleanup requirements.
12. Wash heavy equipment prior to bringing onto the National Forest to reduce the potential for introduction of noxious weeds to the site. Use only weed-free seed mixtures for surface reclamation. Seed would be certified weed-free before purchase to ensure minimum noxious weed content. Use only certified weed-free straw and mulch for surface reclamation. The operator shall be responsible for controlling any noxious weed outbreaks attributed to the operator's activities. The operator's method of control shall be submitted in writing to the AO and approved prior to the initiation of the plan. The lessee shall be responsible for controlling noxious weeds until the reclamation bond is released. A plan for controlling noxious weeds during reclamation would be submitted to the AO prior to the commencement of reclamation. Noxious weeds are determined by the Utah State Commissioner of Agriculture and the county. Both types of weeds would have to be treated.

Administrative Stipulations all ready on the mining plan approval:

7. **YEARLY WEIGH TICKETS:** The Lessee is required to submit Yearly weigh ticket reports prior to February 1 of each year.
8. **OPERATIONS:** If the pit is operated on an annual basis the Lessee is required to notify BLM Utah State Office (801-539-4036) 2 days prior to mining and within 2 days after the completion of mining.
9. **As Built Drawings.** The Lessee will submit to the Deputy State Director, Lands and Minerals, BLM Utah State Office, at the above address, a scaled map showing the construction and the survey coordinates (State Plane or metes and bounds description) of each of the mine features, buildings, within 90 days after construction is complete. The surveyor that conducts the survey will be licensed and shall stamp the drawing. Land features will be shown on the drawing. These will include but are not limited to section corners, roads, and section lines. An updated map will be sent to BLM within 90 days after construction is completed on any new sites.
10. **Yearly Mining Plan.** By January 15th of each year, the lessee will submit a one-year mine plan to the BLM Utah State Office showing the proposed mining sequences for the coming year on a scaled map. The one-year plan will describe the extraction sequence and the projected tonnages of ore to be extracted for that year.
11. **Groundwater.** Should groundwater flow be encountered in quantities greater than 5 gallons per hour during mining operations, the lessee/operator shall contact the AO within 24 hours of the encounter and report on the following:
 - 1) True vertical encountered depth
 - 2) Subsurface location at which it was encountered
 - 3) The approximate flow rate into the mine
 - 4) Association of flow with any major geologic feature such as a fault or fracture surface.

Based upon this information, the AO will determine if the lessee will be required to monitor the effect of the flow into the mine on any nearby wildlife, or stock wells. If such wells are affected the AO may require the lessee to supply replacement water to the affected stock or wildlife ponds.

All groundwater flows encountered in the mine shall be sampled and analyzed for major cations, anions, total dissolved solids, pH, total suspended solids, oil and grease and phenols (See Enclosure 2). The lessee shall follow the rules and regulations of the State of Utah pertaining to the sampling parameters for pollutants and surface effluent discharges from the proposed Gilsonite mine (Utah Administrative Code, August 4, 1995, R317-1.2: General Requirements: R317-8.3: Application Requirements (for a UPDES Permit: R317-6-2: Ground Water Quality Standards). Results from these analyses and sampling parameters for pollutants as required by the State of Utah shall be provided to the AO (USO, P.O. Box 45155, Salt Lake City, Ut., 84145-0155) within 30 working days of encountering the water

12. **Signage.** The lessee shall maintain a sign at the entrance of the pit that lists the Federal lease number.
13. **Cultural Resources.** All personnel will refrain from collecting artifacts and from disturbing any significant cultural resources in the area. The lessee is responsible for informing all persons in the area who are associated with this project that they may be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts. All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to the areas examined, as referenced in the archaeological report, and to the existing roadways and/or evaluated access routes. If historic or archaeological materials are uncovered during construction, the lessee is to immediately stop work that might further disturb such materials and contact the Authorized Officer (AO).

Within five working days after contacting the BLM, the AO will inform the lessee as to: 1) whether the materials appear eligible for the National Historic Register of Historic Places; 2) the mitigation measures that the lessee will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and, 3) a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the lessee wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the lessee will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer (AO) that required mitigation has been completed, the lessee will then be allowed to resume activities.

14. **Paleontology.** The lessee shall stop construction activities and notify the AO if paleontological resources (vertebrate fossils) are exposed or identified during construction or mining. The BLM will provide mitigation measures to allowing construction or mining. Costs of mitigation will be borne by the lessee.
15. **Reclamation.** A seeding and grading plan and schedule will be submitted and approved by the AO prior to finalizing the reclamation. All disturbed areas will be reclaimed with native plant species. The seed mixture will be provided by the AO. Reclamation will not be accepted until the disturbed lands have the same plant composition and density and cover as the surrounding lands. The reclamation bond will not be released until the AO accepts the reclamation in writing. Concurrent reclamation practices will be used.

Topsoil will be stripped and salvaged to provide for sufficient quantities to be re-spread to a depth to be determined in the regrading plan over the disturbed areas to be reclaimed. Topsoil will be stockpiled separately from subsoil materials. Topsoil to be stored for more than one year will be: 1) windrowed, to a depth of no more than six feet; and 2) broadcast seeded with the prescribed seed mixture furnished by the AO immediately after

windrowing, promptly followed by a dozer or other tracked vehicle walking the windrow to cover the broadcast seed. For the windrowing the following pure live seed mixture will be utilized and must be, noxious weed free as per Utah Department of Agriculture regulation R-68-8-2.

Common Name	Scientific Name	Pound per acre
Shadscale saltbrush	Atriplex confertifolia	3
Big sage brush	Artemisia tridentate ssp. Wyomingensis	3
Galleta grass	Hilaria jamesii	2
Four-wing saltbush	Atriplex canescens	4

Mulching may be one method considered to enhance the re-establishment of desired native plant communities. If straw or hay mulch is used, the straw and hay must be certified to be weed-free and the documentation submitted to the AO prior to usage.

16. **Stipulation Waiver.** Any of these stipulations may be waived by the authorized officer (AO) if either the resource values change or the lessee/operator demonstrates to the satisfaction of the (AO) that adverse impacts can be mitigated.